

# SCHOOL OF COMPUTING AND ENGINEERING BACHELOR OF SCIENCE AND COMPUTER SCIENCE API ASSIGNMENT

DATE: November 2023 Time: 2 weeks

You are required to apply the following functionalities to your drug application system.

### **Admin**

- 1. The administrator should be able to add/edit a new drug category
- 2. The administrator should be able to add/edit a new user
- 3. The administrator should be able to add/edit a new drug and assign categories
- 4. The administrator should be able to generate tokens/ user access keys for API access

#### **API User**

- 1. The system should allow the API user to register
- 2. The system should be able to give an API user a general API access token (that has an expiry date) or an API key
- 3. The system should allow the API user to register for/ subscribe to specific API products
- 4. The system should be able to provide access to data for an authenticated API users accessing approved API paths

#### API

The developed API should be able to provide the following functionality via a secure format and insecure format. Secure format means that the API endpoint cannot be accessed unless one has already registered/ subscribed for the API product and has a token/ key.

Expected API endpoints. Results should be a JSON Object and/ or XML file with data

- 1. List of all users (secure endpoint)
  - a) List of all users
  - b) One user's details by email/id
  - c) List of all users by gender
  - d) List of all users who purchased a specific drug, or item in a subcategory/category
  - e) List of all users who purchased a drug on a specific date
  - f) List of all users by last login time
- 2. List of all products/ items (insecure endpoint)
  - a) List of all drugs
  - b) Drug information by id
  - c) List of all drugs by category/ subcategory
  - d) List of drugs by a user [secure endpoint]

#### **API Documentation**

- Select a tool to assist with API documentation
- Document your APIs

## **Submission of the Project**

- Submit your project via eLearning Platform
- Create a video presentation, showing the different sections (Admin, API user, APIs, API documentation) and how you have implemented them.
- Ensure your video remains on showing your face, throughout the presentation.
- Upload video to eLearning platform by Tuesday 28th November 2023, 8:00 AM